IN THE CLAIMS

Claim 1 has been amended as follows:

1. (Currently Amended) A method for adjusting a hearing aid device adapted to be worn at the body of a person, said hearing aid device having a microphone system that, when said hearing-aid device is worn, is disposed outside of the auditory canals of the person, and having a signal processor connected to a filter arrangement, and to said microphone system, comprising the steps of:

subjecting a test object to an acoustic signal originating from an external signal source remote from the test object;

receiving the acoustic signal at the test object at a location on the test object corresponding to a location on the person at which the microphone system is disposed when the hearing aid device is worn by the person, thereby obtaining a first received signal;

also receiving said acoustic signal at an auditory canal of the test object, without any hearing aid device, thereby obtaining a second received signal;

determining a correction function from said first and second received signals that, when applied to said first received signal, at least approximately converts said first received signal into said second received signal; and

adjusting said filter arrangement in said signal processor to apply said correction function to said microphone signal before processing in said signal processor.

2. (Original) A method as claimed in Claim 1 comprising employing a synthetic head as said test object.

3. (Original) A method as claimed in Claim 1, comprising employing a person as said test object.

4. (Original) A method as claimed in Claim 1, comprising employing a person who will wear said hearing-aid device as said test object.

5. (Original) A method as claimed in Claim 1, comprising subjecting said test object to respective acoustic signals from said signal source at different alignments of said signal source relative to said test object, and determining said correction function for each of said different alignments.

6. (Original) A method as claimed in Claim 5, comprising employing, as said microphone system, a system having at least two microphones.

7. (Original) A method as claimed in Claim 6, comprising forming said microphone system from a plurality of directional microphones respectively having different preferred reception directions, and forming each of said directional microphones by electrically connecting at least two omni-directional microphones.

8. (Original) A method as claimed in Claim 6, wherein each of said at least two microphones has an electrical signal path associated therewith, and comprising forming said filter arrangement from a plurality of filters respectively electrically connected in said signal paths.

9. (Original) A method as claimed in Claim 8, wherein each of said filters has a filter function, and adjusting the respective filter functions so that said filter functions, in combination, implement said correction function dependent on said different alignments of said signal source relative to said test object.

10. (Original) A method as claimed in Claim 1, comprising employing, as said microphone system, a system having at least two directional microphones

having respectively different preferred reception directions, and determining said correction function for each of a plurality of different alignments of said signal source relative to said test object, identifying one of said directional microphones having a preferred reception direction proceeding in a direction toward said signal source, and implementing said correction function by adjusting a filter function of a filter electrically connected following said one of said directional microphones.

Claim 11 has been amended as follows:

11. (Currently Amended) A method for operating a hearing aid device adapted to be worn on the body of a user, said hearing aid device having a microphone system that, when worn by the user, is disposed outside of the auditory canals of the user, and having a signal processing unit, said method comprising the steps of:

receiving, with said microphone system, an acoustic signal originating from a signal source remote from the microphone system as an acoustic input signal, and in said microphone system, transducing said acoustic input signal into an electrical microphone signal, ~~said electrical microphone signal,~~ said electrical microphone signal containing a signal error arising due to said microphone system being disposed outside of the auditory canals of the user;

at least partially correcting said signal error with respect to an acoustic input signal that said acoustic signal would generate in an auditory canal of said user without any hearing aid device, dependent on a direction of said signal source relative to the head of the user, thereby generating a corrected signal selected from the group consisting of a corrected microphone signal and a corrected electrical signal ensuing from said microphone signal; and

processing said corrected signal in said signal processing unit to obtain a processed signal, and transducing the processed signal to produce an output acoustic signal, and supplying said output acoustic signal to said user.

12. (Original) A method as claimed in Claim 11, wherein said hearing-aid device comprises a signal path containing a filter, and comprising correcting said error signal by adjusting a filter function of said filter.

13. (Original) A method as claimed in Claim 12, wherein said microphone system comprises at least two microphones, and connecting said filter in said filter path following said at least two microphones.

14. (Original) A method as claimed in Claim 12, wherein said hearing-aid device is adapted to be worn on the head of the user, and comprising correcting said error signal by adjusting said filter function dependent on a relative alignment between said microphone system and the head of the user.

15. (Original) A method as claimed in Claim 14, comprising identifying an at least approximate direction of a location of said signal source relative to the head of the user, and correcting said signal error by adjusting said filter function dependent on said direction.

16. (Original) A method as claimed in Claim 15, comprising identifying said direction using said microphone system.

17. (Original) A method as claimed in Claim 16, comprising generating a plurality of acoustic signals respectively from a plurality of signal sources remote from said microphone system and, using said microphone system, determining a direction of a location of the signal source that produced one of said input signals having predetermined properties.

18. (Original) A method as claimed in Claim 15, comprising identifying said direction as a projection of the signal source in a horizontal plane in which the head of the user is disposed.

19. (Original) A method as claimed in Claim 15, comprising identifying said direction at least approximately in three-dimensions.

20. (Original) A method as claimed in Claim 11, comprising employing, as said microphone system, a system comprising at least two directional microphones with respectively different preferred reception directions, connecting a filter arrangement in a signal path subsequent to the directional microphones, and correcting said error signal by optimizing a filter function of said filter arrangement for at least one of said preferred reception directions.

21. (Original) A method as claimed in Claim 20, comprising employing said at least two directional microphones with respective preferred reception directions that at least approximately define a horizontal plane.

22. (Original) A method as claimed in Claim 21, comprising employing, as said microphone system, a system comprising at least three directional microphones with a third of said at least three directional microphones having a preferred reception direction proceeding at least approximately in a vertical direction.

23. (Original) A method as claimed in Claim 20, comprising employing, as one of said at least two directional microphones, a directional microphone having an adjustable preferred reception direction, and adapting said filter function dependent on adjustment of said preferred reception direction of said third of said at least three microphones.

24. (Original) A hearing aid device adapted to be worn on the body of a user, comprising:

a microphone system adapted to be disposed outside of the auditory canals of the user when the hearing aid device is worn by the user, said microphone system transducing an acoustic input signal, detected from a signal source remote from the microphone system, into an electrical microphone signal, said electrical microphone signal containing a signal error due to the microphone system being disposed outside of the auditory canals of the user;

a signal error correction arrangement supplied with an error-containing signal that contains said signal error, selected from the group consisting of said electrical microphone signal and signals ensuing from said electrical microphone signal, for correcting said signal error in said error-containing signal with respect to an acoustic signal, that is the same as said acoustic input signal detected by said microphone system, acquired in an auditory canal of the user without any hearing aid device, to produce a corrected signal; and

a signal processor supplied with said corrected signal for processing said corrected signal.

25. (Original) A hearing aid device as claimed in Claim 24, wherein said signal error correction arrangement comprises at least one filter with a filter function that is adapted to correct said signal error.

26. (Original) A hearing aid device as claimed in Claim 25, wherein said microphone system comprises at least two microphones and wherein said signal error correction arrangement comprises filters respectively connected to said at least

two microphones, each having a filter function that is adapted to correct said signal error.

27. (Original) A hearing aid device as claimed in Claim 26, wherein said at least two microphones comprise at least two directional microphones having respectively different preferred reception directions.

28. (Original) A hearing aid device as claimed in Claim 27, wherein each of said directional microphones is comprised by a plurality of omni-directional microphones electrically connected to each other.

29. (Original) A hearing aid device as claimed in Claim 27, wherein the respective preferred reception directions of said at least two directional microphones at least approximately define a horizontal plane.

30. (Original) A hearing aid device as claimed in Claim 27, wherein at least one of said directional microphones has a preferred reception direction in a vertical direction.

31. (Original) A hearing aid device as claimed in Claim 25, comprising a detector for detecting a direction at which said signal source is located relative to the head of the user, and wherein said filter arrangement is adaptable dependent on said direction.

32. (Original) A hearing aid device as claimed in Claim 31, wherein said microphone system comprises a plurality of directional microphones, and wherein said detector comprises said microphone system.

33. (Original) A hearing aid device as claimed in Claim 32, wherein said filter arrangement is connected subsequent to at least one of said directional microphones.

34. (Original) A hearing aid device as claimed in Claim 33, wherein said filter is adapted by optimizing said filter function with regard to the preferred reception direction of said at least one directional microphone.

35. (Original) A hearing aid device as claimed in Claim 33, wherein the preferred reception direction of said at least one directional microphone is adjustable, and wherein said filter function of said filter is adaptable to adjustment of said preferred reception direction of said at least one of said directional microphones.